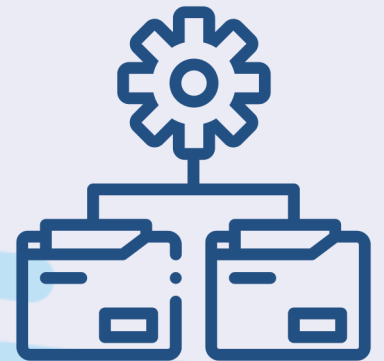


# Key vocabulary about reading #1

## 1. Deep Learning

Deep learning is a subfield of machine learning inspired by the human brain's structure and function, employing artificial neural networks (ANNs) to process and analyze data. It excels in extracting crucial information by filtering it from noise.



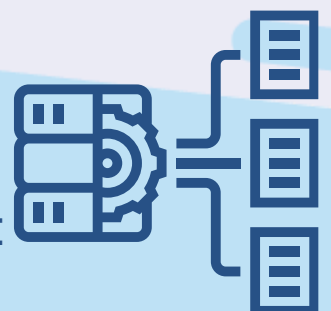
## 2. Generative Adversarial Networks (GANs)

GANs are a type of neural network used for generating new data samples similar to a training dataset. They consist of two networks, a generator creating samples and a discriminator distinguishing between generated and training data.



## 3. Reinforcement Learning

Reinforcement learning is a machine learning type where an agent learns to make decisions in an environment to maximize a reward signal. It involves the agent interacting with the environment, receiving feedback, and updating its understanding to learn a policy for maximizing cumulative reward.



## 4. Transformers

Transformers are a type of deep learning model commonly used in natural language processing tasks like language translation and text classification. They employ a self-attention mechanism to learn relationships between input data points without explicit connections.



## 5. Data Preprocessing

Data preprocessing involves tasks like cleaning, standardizing, and organizing data before training a deep learning model. It ensures data quality, accuracy, and relevance, enhancing the model's performance by removing noise and handling missing or incorrect values.

